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INTRODUCTORY ADDRESS

Presented by
Robert Peter

ON

INDEPENDENCE OF INTELLECT.

By Charles Caldwell, M. D.

Professor of the Institutes of Medicine and Clinical Practice,
IN TRANSYLVANIA UNIVERSITY.

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TRANSYLVANIA UNIVERSITY, }
Medical Department. }

SIR,

WE, in behalf of the Medical Class, tender to you their thanks for the learned and eloquent Introductory Address, which you have been pleased to deliver before them, and to solicit a copy for publication.

By complying with the request of your Class, you will add another to the many favours for which they are indebted to you, and for which, be assured, dear sir, you possess their highest esteem.

HUGH SYMONDS,
WILLIAM B. MACLEAN, } *Committee.*
R. R. CUNY,

PROFESSOR CALDWELL,

NOVEMBER 9th, 1825.

GENTLEMEN,

Permit me so far to trouble you, as to beg that you will be the organ to communicate to the Medical Class my sincere and profound acknowledgments; for the favourable opinion they have had the kindness to express of my Introductory Address, and to inform them that, pursuant to their request, a copy of it shall be immediately placed at their disposal.

Let me further solicit you to accept, for yourselves, my cordial thanks for the very polite and flattering terms in which you have been pleased to convey to me the sentiments of the Class, and to be assured of the high regard with which I have the honor to be,

Gentlemen,

Your very faithful and
Obedient servant

CH. CALDWELL.

HUGH SYMONDS,
WILLIAM B. MACLEAN, } *Commtee.*
R. R. CUNY,

NOVEMBER 9th, 1825.

INTRODUCTORY ADDRESS.

GENTLEMEN,

The time has been, when, perhaps throughout the peopled world, superiority in personal strength, activity and prowess, and superior dexterity in the use of arms, constituted the principal pre-eminence of man over man and nation over nation. Nor, in the great community of *savage life*, where *ignorance* still broods in primitive darkness, or *superstition* lights her phantom-fires but to bewilder and mislead, has that time altogether ceased to exist.

There, superiority in mere *animal*, I might denominate them *brutal* attributes, still asserts over feeble followers its original control. *There*, the chief hunter, the chief fisher, the chief wrestler, or the chief warrior, is still obeyed as the chief ruler or leader of his tribe. In that degraded condition of society, the prime elements of human greatness and recognized authority consist in strength of bone, vigour and elasticity of muscle, excellence of nerve, endurance of breath, and firmness of purpose.

But in civilized and cultivated life, where things are seen and understood in their real nature, and employed according to their true rank and mutual relations, and where the benefits of rationality are extensively enjoyed, man is measured by a different standard, and attains to consideration, greatness and rule, through a different pre-

rogative. Instead of an unreflecting *animal machine*, actuated by the *less noble* propensities of his nature, he rises here to the more distinguished rank of an *intellectual being*, clothed in all the splendid attributes, and exercising all the elevated functions of *Lord of the earth*. Instead of a gross and *grovelling existence*, governed only by uncalculating instinct and *undisciplined feeling*, he enjoys now a *real life* ennobled and purified by *moral sentiment*, and enriched and regulated by all that his more elevated and *reflecting faculties* can achieve and bestow.

For its further illustration, and to demonstrate its pertinency to my present purpose, this topic calls for a succinct analysis.

Inquire but for a moment into the source of that control which man possesses over the inferior animals, whose corporeal strength and agility, together with their natural weapons of attack and defence, are so superior to his own, but whose destiny he notwithstanding directs at will, and renders subservient to his uses and his pleasures? Ask, I say, what enables man thus to coerce and control the surpassing strength, the savage passions, and the warlike endowments of the brutal creation? The answer is equally brief and plain, it is *his superiority in knowledge*.

Ask, wherein consists the difference between the ancient and the modern world, and the vast ascendancy of the latter over the former, in whatever is most precious and important to man? The answer is obvious, it consists in the *superiority of modern knowledge*.

To what shall we attribute the power and felicity of *cultivated and enlightened* over *ignorant* nations, the

inhabitants of each being of the same race? The answer, again, is *superior knowledge*.

To what, the influence and absolute command that one race of men has always possessed, and can never cease to possess over another, which, in the *ruling organ** of the body, is differently and very inferiorly provided?—the dominion which the *man of Caucasus* maintains and must continue to maintain over the *man of Africa*? The reply is conclusive, the Caucasian race is superior to the African not only in knowledge, but in the capacity to acquire and the talents to employ it. To descend to instances more familiar and less contested.

In what consists the superiority of one individual over another—of the adult over the infant, the professional over the unprofessional, the philosopher over the peasant, the chieftan over his soldier, the sane over the insane, and the sage over the idiot? The answer must be framed in the same words, *the superiority of knowledge*.

But wherefore do I dwell on this subject in detail, as if I were defending an assailable position? Knowledge is, at once, the instrument of our power, the source of our past and present enjoyments, and the dayspring of our future anticipations and hopes. Whatever we possess of *earthly* good, and whatever we experience of *rational* pleasure, are necessarily derived from it, and without a competent share of it, heaven itself could never be rendered to us a place of felicity. Extinguish knowledge, and all enjoyment, if enjoyment indeed can then exist, will be gross sensuality.

*The Brain.

Tell not me that between ignorance and virtue, ignorance and piety, or ignorance and bliss, there exists any shadow of *native* affinity—that in the hearts of the uninformed rather than of the enlightened, of the clown rather than of the gentleman, and of the peasant rather than of the philosopher, we are to look for the workings of genuine religion. The sentiment, although often defended and strenuously inculcated in the cant of the day, is a violation of truth, an outrage on common sense, and a presumptuous insult to the God of knowledge. I venture to assert, but not irreverently, that while debased by ignorance, warped by superstition, and brutalized by the vices which *necessarily* accompany them, the Deity himself not only will not, but cannot make man the subject of high and celestial happiness. The ground of this assertion must be obvious to every one. The Deity, all perfect as he is, and governed by the infinity of his own perfections, can neither achieve contradictions, nor act in opposition to his own nature and his own laws.

True *knowledge*, sound *virtue*, and rational *piety* are *natural associates*. If not related to each other as parent and offspring—which might, perhaps, be proved to be the case—they must, at least, be recognized as twin sisters, knowledge being the elder and the more efficient. Unless she afford her lights to direct her younger sisters, virtue and piety, and her influence to retain them within their legitimate bounds, they forfeit their names, by pursuing a career in all cases fruitless, and in many pre-eminently revolting and destructive. Of the truth of this, the history of religion is abundantly pregnant with instructive examples.

If, then, knowledge is the most invaluable of human possessions, if it has constituted avowedly and still constitutes, the fairest and loftiest object of ambition with many of the greatest and best of men that the world has produced; and if, as I trust is the case, an ardent love of it has assembled you within these walls, and the attainment of it, in ample measure, is the object to which you zealously and perseveringly aspire—If these things are true, it will not, as I flatter myself, be deemed by you either uninteresting or useless, that I should so far examine the subject, as to disclose to you some of the obstacles which you will be compelled to encounter in the prosecution of your wishes. It is only from an intimate acquaintance with those obstacles, that you can hope or be prepared to avoid, remove, or ultimately surmount them.

Next to the intrinsic difficulty of the pursuit, arising out of the limited capacity of man, and the extent and intricacy of the system of nature, the most formidable obstacle to the attainment of knowledge, is presented by the *dependent and shackled condition of the human intellect*—a condition, which not only enfeebles its energy in action, but detracts not a little from its disposition to act.

To many, if not to most of you, this proposition will probably appear, at first view, to stand on a foundation dubious at least, if not radically defective. You, no doubt, fancy yourselves convinced by personal consciousness, that your own intellects, neither dependent nor trammelled, but under your own entire control, are perfectly free to search for truth wherever it may lie concealed, and embrace it freely, wherever it may present

itself. And hence you will probably infer that the intellects of others are, in an equal degree, independent and free.

If such be your opinion, permit me respectfully to express my apprehension, that you have formed it hastily, without that thorough examination of your own feelings, and that strict attention to your own experience, which are essential to a perfect acquaintance with yourselves. It is indeed a matter exceedingly doubtful, whether the most enlightened, severe, and accurate self-scrutinizer who honors me with his presence, is aware of the extent to which his intellect is deprived of its independence and freedom. An analysis of this subject being somewhat curious as well as useful, encourages me to hope, that you will neither deem it an unsuitable theme for the remainder of my address to you, on the present occasion, nor refuse me your attention in the course of the discussion.

As a preliminary, essential to accuracy in the disquisition, allow me to observe, that as the person of man is deprived of a portion of its liberty by every thing that prevents or impedes its entire freedom and efficiency of action, the same is true in relation to his intellect. To be independent and free, the latter, like the former, must be exempt from restraint, coercion and bias. It must be at liberty to investigate, without prepossession, every subject that may be presented to it, in every mode of research of which the subject is susceptible.

The first consideration to which I shall invite your attention, as tending to the abridgment of intellectual freedom, is what is usually denominated the *prejudices of education*.

The vast extent of this cause, and the great amount of its influence in the control of the intellect—in one case restraining it from action, in another irresistably urging it on; now authoritatively directing the course it is to pursue and the topics it is to investigate, and again interdicting it from the course and subjects it would itself select; and in most instances modifying the issue of its labours—The extent, I say, of this cause, and the influence it exercises over the condition of the intellect, but few, perhaps, have examined with the strictness they deserve, or allowed them the weight which they actually possess in their effects on the progress of human knowledge.

It will be understood and born in mind, that the term *education*, as here employed, is not limited to the mere information we receive, and the intellectual discipline we experience, at seats of learning. Its interpretation is intended to have a much wider scope. It embraces the entire amount of the intellectual cultivation we attain during life, by reading, observation, reflection, conversation, oral instruction generally, and every other mode of improving our faculties, and acquiring knowledge. It means the general course of inquiry our intellect is compelled to pursue, the shape into which it is moulded, the opinions it adopts and the principles implanted in it, and the modes of investigation to which it is forced to conform, by the predominant spirit and peculiar character of the age, country, and civil community in which we live. It means, in fact, the aggregate effect produced on man by all sensative impressions from without, whether literary or social, physical or moral, theological or political, and all the intellectual exercises in which he engages.

That this confederacy of agents exerts over the intellect a very marked and controlling influence, abridging, in many instances, its freedom of action, first principles induce us to believe, and all experience definitively proves.

By a recognized and immutable law of his nature, cultivated man is necessarily the creature of the circumstances that surround him. By them, as instruments in the hand of Heaven, he is fashioned into the being which he ultimately becomes. Nor, while placed in the midst of them, does he possess the power to resist their action. The general sweep of the combined influences, moral and physical, social and political, philosophical and literary, of the period and country in which he lives, he can no more resist *intellectually*, than he could *corporeally*, if thrown on its surface, the surge of the ocean when driven by a tempest.

The customary studies of the time are his studies, and it is rare that he either varies or transcends them; the science, letters, and arts are his, and he goes not beyond them; the manners, customs and amusements are his; the feelings, taste and opinions are his; and his are the prejudices and superstitions, the predilections and antipathies that generally prevail. Even when of the highest order and the most capacious span, his intellect can be nothing more than a correct epitome of the intellect of the time. If to this rule a few rare and signal exceptions have existed, they are *but* exceptions, and *but* few—*rari nantes in gurgite vasto*—and must be so considered.

That this statement is true, the works of authors who have flourished at different periods bear ample

testimony. To bestow on them the highest praise to which they are entitled, such productions do nothing more than give a fair representation of the knowledge of the times in which they were written. Hence to those who are familiar with the chronology of science and letters, the dates of many publications are satisfactorily indicated by the views they exhibit, the doctrines they contain, and their general style and manner of expression.

In illustration and confirmation of this, medicine and chemistry are rich in examples.

When, in the former science, mechanical philosophy prevailed, as being the fashionable philosophy of the day, every writer and teacher was so far restricted by it in his liberty of intellect, as to be compelled, yet without perhaps recognizing the compulsion, to exhibit himself, in some degree, a mechanical physician. Although he might *oppose* the doctrine *in part*, he also *adopted* it in part, in obedience to the professional empire of the time.

When the doctrines of humoralism were predominant, such was their sway, and so absolute their despotism, that physicians, resigning their liberty of thought, submitted, without a struggle, to the overwhelming pollution. They found themselves compelled to become orthodox humoralists.

When, by their misapplication and abuse, chemical doctrines introduced corruption into the science of medicine, individuals devoted to it were constrained to become chemical both in their reasonings and practice. Hence the lamentable errors into which they were hurried by the predominancy of opinion. In the same way even astrological visions have been introduced into medicine.

Now that the doctrines of vitalism prevail, so authoritative is their influence and so despotic their rule, that physicians are scarcely at liberty to inquire how far some of them may be erroneous, and to what extent certain dissentient opinions may be true.

To chemistry, general philosophy, and even the science of Theology itself, had I leisure to dwell on them, I could show that similar observations are applicable. They too, in common with medicine, have been, at times, adulterated by false theories, which, invading the intellectual freedom of their votaries, have seduced them into some of the most extravagant errors.

But while thus controlled by the supremacy of opinion, the human intellect is no more free in its deliberation and choice—free to engage in all investigations which judgment may sanction, and to pursue them by the means that reason indicates, than is the soldier or the vassal, who is compelled, under the solemnity of an oath and at the hazard of life, to surrender up his own will, and submit implicitly to the arbitrary mandates of his *Chieftan* or his *Lord*. In either case the spirit of independence is paralysed, that of humble submission implanted as a substitute, liberal views and bold conceptions, if not actually prevented, opposed or misdirected, and vigour and efficiency of action frustrated. Under these circumstances, error must be often successfully inculcated, and even inquiries after truth enfeebled and suppressed. Independently of all other unfavourable influences, the tendency to this effect is greatly strengthened by the narrow views and erroneous impressions received from early teachers and the unfortunate systems of instruction that too generally prevail in seats of learning.

Hence, then, it appears, that education itself, as heretofore and even at present conducted, is not a source of *exclusive* advantage. In proof of the imperfection of all things sublunary, even *it* is debased by some share of alloy, as is conclusively manifested in its *crippling the freedom and independence of the intellect*. So true is this in relation to *certain* schemes of education, that while they inculcate knowledge within *a given sphere*, they erect artificial barriers, not only to shut out the truth that may lie beyond that sphere, but to check the spirit of liberal inquiry that might lead to its attainment. Did time permit me to go into detail, examples in proof of this might be abundantly adduced.

Another cause, less extensive, perhaps, in its prevalence, but within its range, which is sufficiently spacious, equally powerful in its operation, in circumscribing the freedom of the human intellect, is the *influence and authority of distinguished names*.

The order of nature is subordination, the higher powers governing, the lower submitting to direction and rule. The brain is paramount among animal organs, by its influence excites to action the other parts of the body, and, in many instances, gives to action its efficiency and character. Man is lord over inferior beings, the parent is the recognized governor of the child, and, among men, the more highly gifted give laws to those whose endowments are humble. Descending to dead matter, we find that even there the predominancy of rank among the different kinds of it is graduated by power.

As far as it comports with reason, and carries with it the sanction of nature, this subordination should never be violated. The superior powers ought to govern, as

long as moderation, truth and justice govern them. But at that point their authority should cease. They ought neither, by an inordinate measure of power to be permitted to become absolute, nor should their influence be acknowledged, or their governance tolerated, when their principles are erroneous.

In relation to political sway, this truth is now recognized as a favourite sentiment, and adopted as a rule of action, wherever public right and individual freedom are understood and maintained.

But with regard to certain other modes of domination the case is different. Through them man still continues to lord it over his fellows, with a force of authority which is alike injurious to the freedom of the intellect and the progress of knowledge.

In reference to this subject, recorded and well known events may be adduced in abundance as authority for asserting, that the *empire of opinion* is as hostile to right, as subversive of independence, and, in many respects, as fatal to the interests of man, as the empire of the sword. It is even more degrading to him, because it enslaves his intellectual and nobler portion, while the other invades but his liberty of person. As a further consideration which renders it the more appalling, and adds not a little to the amount of the evils it produces, its duration is, in some instances, almost interminable. The dominion of the Sceptre is much more perishable, because it stands on a more destructible basis. Its chains and fetters are thrown around the *person*, and may be broken or unbound by the energies of the mind. But when the mind itself is enthralled and reduced to a state of unresisting vassalage, the case is more desperate, and the prospect more hopeless.

In proof of the correctness of this view of things, a host of illustrious examples may be adduced.

The empire of opinion erected by the metaphysical subtleties of Aristotle, outlived, by many centuries, that which Alexander, his warlike pupil, established by the sword. So true is this, that the influence of the former is, in many places, felt and recognized even now, while, by the current of events, the latter has been long since swept from existence, and history only tells us that it was. Nor was the sword of the pupil more fearfully fatal to personal freedom, than was the pen of the master to the freedom of the intellect. Even in very modern times, and in one of the most enlightened countries of Europe, it was made penal to oppose the doctrines of the Stagyrte.

In our own profession the dominion established by the opinions of Hippocrates, has been no less extensive, despotic, and durable. For twenty centuries did that illustrious author occupy the ground, and by his thousands of vice-gerents, perform the functions, of an autocrat in medicine. If any physician had the hardihood to differ from him in opinion, or even to add to what he had written, except in the form of orthodox commentary, he too frequently encountered the *censure* at least, if not the *angry denunciation*, of his less independent professional brethren. Even at this enlightened period, practitioners may be found in the ranks of respectability, who are obedient followers of the physician of Cos.

For many ages the opinions of Socrates were a law to his countrymen, if not to foreigners, which it was held heretical and unholy to violate; and for a much longer period, and on a wider scale, the visions and mysteries

of the divine Plato delighted and enslaved the intellect of the world.

So absolute was the authority of Cicero over his countrymen, that in matters of philosophy, letters and eloquence, he may be said, with a few exceptions, to have been the last of the Romans who thought for himself. Notwithstanding his opposition to regal supremacy and despotic rule, he was more of a *philosophical* than Cæsar was of a *political dictator*. Against the life of the latter an illustrious band of heroes and patriots successfully conspired, while no one had the hardihood to rebel against the former, but submitted to his dictation on the subjects specified, without hesitation, resistance, or scrutiny. Nor did his influence terminate with the close of his life. Having directed the empire of opinion while living, he swayed it with an augmented despotism after his death, whereas, the empire of Cæsar sunk with his person beneath the swords of the conspirators.

Confucius and Zoroaster surpass in the compass and duration of their despotism, all the legitimate monarchs and military usurpers that Asia has produced. Where heroes and princes have reigned only years, they have reigned for ages, and, from present appearances, their dynasty may be considered perhaps interminable. Nor can any dominion be more absolute, or more fatal, to the march of freedom of any description, than theirs over the intellect of their bigoted followers. Hence, the very limited developement of truth and knowledge within the sphere and influence of their doctrines.

To descend to more modern times, the position I am defending receives from the policy and achievements of Mahomet, the amplest corroboration. Determined to

erect an empire of his own, that profound and exquisite judge of human nature deemed it wise, and found it requisite, to unite to the terrors of the sword, the more irresistible and permanent influence of sentiment and opinion. Nor has time failed to prove the superior power and efficiency of the latter element of this well concerted union. While the author of the Koran is but slightly recollected or felt as a leader of armies or the founder of a throne, his absolute control as a teacher and a prophet, is fatal to the intellectual freedom and independence of a large portion of the human race.

Did the occasion require it, other instances to the same effect might be cited in abundance

In medicine, the examples of Boerhaave, and Hoffman, and Cullen, and Brown, are sufficiently striking. For a period of time by no means inconsiderable, and throughout a large portion of Europe and America, did those great teachers exert a control, subversive of independence, over the intellect of physicians. To concur in their opinions and servilely follow them in practice was orthodoxy, to oppose them in either, intolerable heresy, and even to question their infallibility, dangerous scepticism. The consequence of this was, that during the protracted continuance of their empire of opinion, such was the paralysed condition of the medical intellect where their influence extended, that, their own labors excepted, but few discoveries or important improvements were made in our profession.

The same thing is true in relation to astronomy for a long period after the the discoveries of Sir Isaac Newton.*

*The author means, of course, after the truth of those discoveries was recognized. But in France and other parts of the continent of Europe, nearly half a century elapsed before this recognition took place.

While the intellect of christendom was overwhelmed with astonishment, and awed into submission, from a sense of inferiority, by the unparalleled achievements of that great philosopher, the spirit of improvement in his favorite science was almost extinguished. Instead of looking into the heavens for astronomical knowledge, most men, for a time, looked only to him. His errors, as well as his truths had the weight of authority, but few men venturing to question the accuracy of his statements. To disbelieve him was infidelity, and to attempt an improvement in astronomy, all rich and resplendent from his labors, daring presumption.

In relation to the science of war, Frederick of Prussia threw a spell over the intellects of the chieftains of Europe, arresting its progress, until the time of Napoleon; and, notwithstanding the misfortunes and fall of the latter, there is little doubt but the genius of that wonderful man will be productive of a similar effect for a much longer period. To inferior intellects his sentiments will be a law, which they will want confidence to violate or question.

As some drawback on the multiplied and signal favors he has bestowed on the world, even Bacon himself, has thrown into chains the intellects of thousands who are familiar with his works. He has unintentionally taught them to substitute his authority for that of nature, and thereby checked the spirit of original and independent research.

A more instructive example of the perverting, debasing, and enfeebling effects of mental slavery, than that great philosopher himself exhibited, is scarcely to be found in the history of man. While a favorite at court, he so far bartered for the approbation of a corrupt ministry

and the smiles of an arbitrary monarch, the independence and strength of his mighty mind, that he rarely rose, in his addresses as an advocate and a counsellor, or his opinions as a judge, above mediocrity.

It was not until after his downfall and disgrace, as a public character, and his removal from the withering influence of royalty, that he became, in his intellect, independent and free. Nor was it until then, that, spurning the authority of human precedent and the control of human opinions, and holding himself in his inquiries amenable only to the authority of nature, he at once enriched and astonished the world with the unprecedented efforts and achievements of his genius.

Such is the effect of the influence and authority of great names in trenching on the freedom of the human intellect, and such the barriers to the progress of knowledge which they consequently erect. So weighty and serious have the evils arising from this source been considered, that it has been deliberately inquired into as a matter of doubt, whether philosophers pre-eminently illustrious have most benefited or injured their favorite sciences.

Did time permit, I might speak of the deleterious operation of *fashion* on intellectual freedom. For there is a fashion in science and profession as well as in manners, amusements, and dress; and it is rarely favorable to liberal inquiry. But it is so intimately connected with the prejudices of education and the influence and authority of great names, that its effects in impairing intellectual freedom will sufficiently appear from the preceding consideration of those two topics. A strongly marked and perverting fashion in thinking and inquiring

is usually the result of mismanaged education, or of the peculiar cast of mind and obliquity of research, of some powerful and popular writer or teacher.

Political despotism in every shape, but especially if it be administered in a spirit of tyranny, is another cause pre-eminently unfavorable to independence of intellect. Knowledge is the natural and deadly foe of despotic power. So radical is their hostility, and so absolute their tendency towards mutual destruction, that they cannot co-exist in the same community. Hence, from motives of self-preservation and security on his throne, it is imperative on the despot to repress knowledge and liberal inquiry among his subjects at large, by every expedient that ingenuity can devise and power employ for the shackling of the intellect. This he does by rendering it dangerous for them to exercise it freely on *certain* subjects, until, by long disuse and inaction, they lose the wish to exercise it vigorously on *any* subject. Hence, under some governments, the depth of despotism and the rigor of tyranny may be fairly determined by the degree of intellectual paralysis that prevails. Nor does the unfortunate condition of the intellect arise alone from its feebleness and torpidity. As far as it does act, it receives from surrounding influences an obliquity of direction, conducting it to error rather than truth. So deeply and essentially is the intellect modified by the impressions it receives, that it is not possible for it to pursue, under a despotic government, the same train of thought, and arrive, on certain subjects, at the same results, that it does under a free one.

Even under the wisest and happiest government the world has witnessed—I mean our own—the intellect is

not free. The spirit of party, so abundantly cherished by the freedom of our institutions, although not unaccompanied by certain redeeming advantages, fetters the mind, prevents it from acting with fairness and independence, and sometimes even hurries it into the wildest enormities, as if it were the sport of tempestuous passion. Hence the cause why conflicting partisans of equal powers to judge and reason, think so differently on the same subject, and assail each other, at times, with the deepest denunciation. And hence the obligation which all men should feel, if not to extinguish party, at least to moderate the intensity of its fire, as essentially unfavorable to the advancement of knowledge.

But the most iron despotism and unrelenting tyranny—that which throws the heaviest fetters on the human intellect, and makes the deadliest invasion of its freedom and independence, is the despotism of the church. That is the tyranny which sinks deepest into the soul, paralyzes its very essence, and most appallingly blights and withers its powers.*

Let me not be understood as confining my views exclusively to the *christian* church, but as embracing within them the church universal—as comprehending that entire corps of the privileged and the consecrated, whose high vocation it is to act as intermediaries between man and his Creator, expounding and inculcating the duties of the former, and interpreting the pleasure and unfolding the august dispensations of the latter.

*It is to be distinctly understood that nothing disrespectful to religion in the abstract is here meant. The denunciation is against its *corruption* and *abuses*. Nor is any allusion made or intended to any particular sect or individual. The author arraigns alike all abuses of religion that tend to narrow, enfeeble, or in any way deteriorate the human intellect.

“Tros Tyriusque mihi nullo discrimine agetur.”

That the divine institution of religion, which, when pure and rational, is calculated and intended to bestow on man his most invaluable privileges, and elevate him to the highest pitch of excellency, rank, and grandeur that his nature can sustain—which introduces him more immediately into the family of Heaven, and thus opens to him a channel of more direct and endearing communication with his God—That an institution thus high and holy in its nature, and thus transcendently delightful and important in its operations and effects, should be prostituted to the foul and execrable purpose of degrading the very being of man for whom its benefits are intended, is a circumstance that cannot be sufficiently deplored. Nor can it ever fail to awaken in the bosom of the virtuous, the most intense abhorrence of those by whose faithless and corrupt ministry the prostitution has been perpetrated. Yet, that an effect so debasing has thus arisen from the detestable abuse of a cause so celestial, incontestible evidence may be abundantly derived from almost every page of the history of religion.

The pernicious effects produced on the human mind by the abuse of religion are of a twofold character; the arbitrary inculcation of false doctrines, and a prohibition to investigate truth.

As an instance of the first sufficiently memorable, may be cited, the belief in a *plurality* of Gods, instead of *one God* performing by the exquisite organization of the universe a *plurality* of functions.*

This opinion enforced on the human intellect by the weight of what is announced as divine authority, en-

*No defence is here intended of the doctrine of *unitarianism*, as usually interpreted. The allusion is to the *unity* of God as opposed to the *polytheism* of the ancients, and of many nations of the modern world.

croaches most injuriously on its freedom and independence, and prohibits it in a high degree, from liberality of research. By representing many of the great phenomena of the universe as proceeding immediately from the agency of a God, it prevents it from studying nature as she is, and from regarding her as a system of physical cause and effect, every thing being the result of secondary agency, except the primitive impulse to motion, impressed by the touch of the omnipotent constructor and allwise director of the mighty machine.

Examples of opinion to this effect might be abundantly cited. Thus, according to certain theological superstitions, deeply radicated in the human intellect, lightning and thunder are the fiery indignation and the threatening voice of an offended Deity, and must not be made subjects of philosophical research; the appearance of comets and eclipses are manifestations of divine displeasure, and must be met by prayers and propitiatory offerings, instead of observation and rational inquiry; and the same thing is true of droughts, hurricanes, inundations, famine, pestilence, and various other evils both physical and moral. Under the same head is to be included the immediate ministry and superintendence of angels and tutelary saints, a hypothesis strenuously advocated and received by many as a matter of faith. All such opinions, inculcated by a religion of falsehood and superstition, shatter the independence of the human intellect, unfit it for bold and manly aspirations, and limit and enfeeble it in its sphere of action.

That the Gods are jealous, cruel, or vindictive, actuated by the most malevolent and ferocious passions of man; that they are inexorable in their resentments, or

unreasonable in their exactions; that they delight in human sacrifices, or any kind of human sufferings or privations, such as seclusion from the world, severe penance, or unnatural and tormenting self-castigation—That such is the character of the Gods we are to worship, and such the process by which their worship is to be performed, is a belief not only absurd and revolting in itself, but highly injurious to the freedom of the intellect, and its improvement in knowledge. It produces its baneful effects, by urging, as a motive to piety and homage to God, the debasing and enfeebling passion of fear, instead of the invigorating and ennobling affections of gratitude and love. It even extinguishes in the intellect its pure and delicate perception of truth, by constraining it, under the heaviest penalty, to the adoption of sentiments contradicted by every feeling within us, and every manifestation of nature around us.

A factitious system of theology like this, composed of tenets which reason denounces and benevolence and genuine piety abhor, is deadly to every thing subject to its influence. To the human soul it is a moral poison, blighting and withering its choicest affections, and restraining it from manly and noble exertions. It is to the *intellect* like the barren heath in *physics*, where the orange, the olive, and all other generous productions refuse to flourish, and whose meager growth is the bramble and the furze.

A scheme of religion which embraces mystery as an essential element, and arbitrarily exacts an implicit acquiescence in it, is so far at war with nature and reason, and operates as a fetter on the human intellect. It demands of man that which, as a rational being, he can-

not concede, *belief without evidence*—and not only so, but *belief of that which is not intelligible*.* It thus far invades his most invaluable right, by attempting to render him intellectually a slave.

Belief without conviction resulting from evidence forfeits its name, and becomes *credulity*. But that religion which, in any case, enjoins credulity as a duty, is unfriendly to truth, and cannot be sanctioned by the God of truth. Credulity is contagious in its relation to the faculties and operations of the mind. If it be indulged in one pursuit it will be indulged in another, to the neglect and rejection of that severe analysis and accuracy of research, which alone give strength and adroitness to intellect, develop truth, and become productive of great and important results. Mysteries in religion are like charms and secret nostrums in medicine†

* A greater outrage cannot be offered to a rational being, than solemnly to denounce him as doomed to everlasting punishment, for not implicitly believing what is *incomprehensible to him*. It is literally to condemn and punish him for *not performing an impossibility*—an act which would deepen the stains on the escutcheon of a Caligula. To prefer against the Deity a charge so inconsistent with justice and goodness, is flagrant blasphemy.

On this topic the society of Friends set a most praiseworthy example to christians of other denominations. Their creed in relation to it is, that, “no man is *required*, much less *compelled*, to believe what he does not understand.”

† For thousands of years theological mystery has been one of the heaviest misfortunes of man. Whether it appear in the mystic rites of the Fire-worshippers, of Eleusinia, of the Druids, of Juggernaut, or of any other form of religious worship, its spirit and tendency are always the same. To adopt it as a matter of belief, shackles and debilitates the human intellect, and to practise it is an exhibition of solemn mummary. It is a cloak to conceal knavery from the view of folly. The honest and the liberal never deal in it, nor are the enlightened ever deceived by it. Like other mists and clouds of superstition, it is destined to disappear, and is even fast disappearing, with Papal infallibility, and the divine rights of kings, before the sun of science and truth.

That which is true needs no mystical trappings to recommend it. Like beauty; truth “when unadorned is adorned the most.”

What takes respectability from all mystery is, that the votaries of each different scheme of religion, disbelieve in the mysteries of every other, and labor industriously to cover them with contempt.

They are the resort of quackery and the pobulum of imposture, and those who deal in them are never distinguished by their knowledge of nature. They are wanting in science or wanting in honesty. Search the history of theology and medicine, and it will testify to the truth of these assertions.

But, as already observed, religion abused not only imposes false doctrines, but, by inhibiting also the liberal prosecution and general diffusion of those that are true, doubly enslaves the intellect of its votaries. From this latter source have arisen some of its most revolting practices and deplorable evils. Denunciations, anathemas, persecutions and tortures, and other modes of trenching on intellectual independence, have been the detestable products of this cause.

Pythagoras was banished from Athens, and Anaxagoras imprisoned there, because they dared, in matters of religion, to think for themselves, and become the advocates of forbidden doctrines.

For the same reason Socrates was sentenced to the poisoned chalice. And, on account of the extent of his researches, and the liberality of his views, which led to opinions that were denounced as unholy, even Cicero* was threatened with the vengeance of the priesthood.

In modern times Gallileo was imprisoned, at an advanced age, and marked as a victim of inquisitorial torture, for promulgating his discoveries in the science of astronomy.

Vesalius, Varolius, and the immortal Harvey, were persecuted for pursuing and discovering truth.

*“Two augers, said that illustrious philosopher; cannot together consult the entrails of victims, without *laughing*, and ridiculing the practice.” Yet for three centuries afterwards was the practice continued:

Nor were Bonnet and Linnæus, Buffon and Lavater, the latter in particular being one of the most amiable and virtuous of men, permitted to escape the denunciations of the church—And all this, because they dared to become more enlightened, independent, and liberal in their pursuits, than their fanatical cotemporaries.

From the same source have arisen in the church, all the fiery indignation of sect against sect, and denomination against denomination, and all the sanguinary scenes of persecution and martyrdom, which christendom exhibited in former ages.

But why do I resort to distant nations and remote periods, for examples of those abuses of religion, which have been too numerous in our own country, and, in certain parts of it, constitute the disgrace of the present time

In this favored land, the fair and selected abode of liberty, where our forefathers fought and bled for independence, and where our government and all our public institutions are marked by a manly and liberal spirit—Even here, within the pales of this moral and political paradise, do many of the functionaries of a religion which they dishonor, attempt to erect their puny hierarchy, and insolently lord it over the minds of freemen. Let but a sentiment be uttered in opposition to their dogmas, and which, in their narrow and perverted construction of things, church legitimacy does not sanction, and the author of it is instantly marked as a victim, and the consecrated enginery meant for his destruction thrown into play.

What if this self-righteous fraternity do not attempt to drag him to the stake and purify him to *their* minds

with the torch and the faggot! What if they do not assail him with the wheel, the rack, the pincers, the screw, or other instruments of corporal torture! Is it because they possess not the inclination? or because they want the power?—because they will not, or because they *dare* not, the laws of our country, and the spirit of the age being hostile to such enormities? To these interrogatories let others reply. Although facts are not wanting to create suspicion, I individually shall not condemn the reverend actors beyond their deservings. On another point in relation to them, judgment may be safely and confidently pronounced. They cannot be acquitted of the charge of attempting to agonize the mind, and annihilate both the influence and the usefulness of the object of their resentment, by destroying his reputation. And for this purpose their means are neither few, feeble, nor unskilfully used. They are the slanderous tongue, employed, as artful policy may direct, in the secret whisper or the loud report, the envenomed pen busied in the work of cowardly intrigue or daring defamation, the press, sullied by their productions, as if the types had been dipt in the dregs of Acheron, and every other weapon of inexorable hatred and moral vengeance which they are able to wield. In this way, while the enlightened and the manly despise and abhor them, they contrive, to circumscribe the intellectual independence of the uninformed, the timid, and the feeble-minded, and thus impede their advancement in knowledge.

So true is this, that, as time and circumstances may seem to render it opportune, they do not hesitate to make open war on knowledge. They countenance and

even adopt the miserable cant, that piety dwells with the lowly and the uninformed, while the more enlightened and the elevated are tainted with infidelity and irreligion. Thus do they seem, in their intercourse with their followers, to encourage *ignorance here*, by offering in exchange for it the abundant *rewards of heaven hereafter*.

But the ground of this pitiful calumny is obvious. Science is hostile to the claims of fanaticism, and ignorance only submits to its rule.

Fanaticism and *intolerance* are twin Furies, the foul and deformed offspring of unenlightened intellect and malevolent passion. The Harpies of fable are not more revolting, nor the Eumenides themselves more fiercely vindictive. But *true and rational piety* is the meek and unassuming child of correct knowledge and kind affection. Like the spirit of the Messiah himself, *its* spirit is neither fierce nor fiery, its footsteps have never been drenched in blood, its breath has never been tainted with venom, nor has one of its acts been the product of vengeance. Hence the *former*, being of the family of darkness, are deeply hostile to knowledge and virtue, while the *latter*, being in all respects and essentially their opposite, is favourable to both.

Acquaint yourselves with the clergy who are liberal and tolerant, benevolent as men and charitable and humble as christians, and you will find them well gifted by nature, and respectably cultivated; while the bigots and fanatics, proud in spirit and insolent in deportment, who measure piety and a title to heaven by the depth of denunciation which individuals practice, and the sentiment of ferocious intolerance which they cherish, are

meager in intellect, and ignorant of every thing but the dogmas of their calling. This, if not the universal, is at least the general rule, to which but few exceptions exist. No wonder, then, that the latter are hostile to that independence of mind which is destined to destroy them.

Although several more *might* yet be enumerated,* the last cause I shall mention as tending to the abridgment of intellectual freedom, is *the envy and jealousy of inferior minds, directed against those of a superior order*. The former, engrossed by selfish and unmanly feelings, and having no power to exalt and distinguish themselves, are perpetually engaged in petty intrigues and ignominious machinations, to prevent, as far as possible, the exaltation of the latter.

To carry into effect this *system of levelling*, and convert it, in part, into a *moral bed of Procrustes*, the expedients they adopt are numerous and artful, and all of them envenomed with the essence of slander. Of these I shall content myself with the notice of one, which I

*In the administration of a medical school, the intellectual independence of professors is, in many instances, very seriously and unjustifiably invaded, to the great diminution of their efficiency in teaching.

This is always and necessarily the case, when each professor is rigidly confined to his own department, and prevented from illustrating and enforcing his subject by all the collateral lights he can collect.

The only remedy for this evil is, *to leave the minds of the teachers untrammelled*. Let each of them be at liberty, so far to trespass on the departments of his colleagues, as to derive from them whatever may be requisite for the faithful and satisfactory administration of his own. In this way alone can they do justice to their profession, their pupils, and themselves.

The science of medicine is a whole, and can be suitably expounded only by rendering the resources of every part of it tributary to the development and illustration of the other parts.

While all the *practical* departments, then, must draw on the *philosophical*, for principles to govern and direct, let the philosophical draw on them for facts to illustrate and confirm; and, like the different compartments of a well constructed edifice, they will at once adorn and strengthen each other.

have found the most prevalent, and which, often under the guise of good nature, and kind regret for the fault of a friend, is always tainted more or less, and sometimes very abundantly, with a spirit of malevolence.

When richly gifted and able inquirers engage in an investigation somewhat new, too troublesome for the indolent, and too arduous for the feeble, they are immediately stigmatized by the envious and the jealous, as *prone to "speculation."* That term, although of no bad import in itself,* yet when thus artfully used for sinister purposes, awakens prejudices which are often unconquerable. It falls like a spell on ordinary intellects, distorting their views, too often perverting their feelings, abridging their independence and freedom of action, and throwing between them and truth a very formidable barrier.

The malevolent employment and application of this term constitute one of those vulgar but operative weapons of intrigue, which none but the groveling and the feeble can descend to wield, but which scarcely the most powerful can hope to resist. Limited to neither time nor place, it has been always and every where used, to sully the lustre and detract from the standing of the distinguished and the elevated, to fetter by prejudice the minds of the "million" and so far to cripple and retard the march of knowledge, as to enable the jealous crowd

*By the most approved lexicographers it is interpreted "*mental view, intellectual examination, contemplation. A train of thoughts formed by meditation. Mental scheme not reduced to practice.*"

It means, *at worst*, nothing more than the collecting and embodying of the strongest probabilities, where facts and positive demonstration are wanting. In other instances, it is an avowed reliance on sound and correct analogy. It is not to be identified with puerile hypothesis, or a pursuit after transcendentalism. Those who thus interpret the term, are ignorant of its meaning, and are referred to their dictionaries, and the origin of the word, for better information.

of indolent, feeble, and clumsy pursuers of it to keep it still in view.

When, in opposition to the polytheism of the day, Socrates contended for the unity of God, while the priesthood denounced him as guilty of impiety, the puny philosophers charged him with "*speculation*." The cause of this is plain. His reasonings, as leading to truth, and being at once elevated, profound, and of great compass, were dangerous to the vocation and standing of the former class, and beyond the limited comprehension of the latter. Self-interest and pride, therefore, were confederated against him, and concerted jointly the means of his destruction.

When Democritus attempted, by dissections of the human brain, and examinations of other sympathizing parts of the body, to discover the seat and pathology of of madness, the Abderites pronounced him guilty of "*speculation*." The reason was, that the views he entertained in relation to the subject, were so far in advance of those of the age, that they were not understood.

When Gallileo discovered and announced to his contemporaries the movements of the earth in relation to the sun, the *Scavans* of the day pronounced it "*speculation*."

When Harvey discovered the circulation of the blood, "*speculation*" was the argument with which he was confronted. Nor did any English physician who had passed the fortieth year of his life, cease, until the close of it, to employ the term in derogation of the discovery.

When Columbus was endeavouring to procure from some of the reigning sovereigns of the time, an armament to attempt his voyage of discovery, the charge of "*spec-*

ulation" preferred against him by his short-sighted contemporaries, threw into his path such formidable barriers, as were near defeating his daring purposes.

By the term "*speculation*," especially in France, were the sublime discoveries of Newton assailed, when he first disclosed them, and, on this ground, did his adversaries, the Zoiluses of the day, make a puny attempt to discredit his labors.

When Franklin first suggested the probable identity of electricity and lightning, the key-note "*speculation*" was raised and repeated, by all the little captious electricians of the day. Nor did this Lilliputian chorus of opposition die away, until it was awed into silence by the lightning which the philosopher extracted from the heavens.

Against the great discovery of steam-navigation, when the subject was first agitated, "*speculation*" was uttered and loudly repeated, until patience was exhausted, and echo herself grew weary of the sound. And yet that memorable project has been achieved, and will exist, an imperishable memorial to the genius of its author, when its feeble opposers shall sleep in forgetfulness, or be remembered only as teasing insects, which the lion had calmly brushed from his brow.

When, upwards of twenty years ago, an effort was made in our own profession, and in our own country, to prove that yellow fever was not contagious, the loud cry of "*speculation*" was heard from every quarter, with a pertinacity, vehemence, and tone of resentment, that were somewhat appalling. And yet, in the midst of opposition, and in defiance of such fearful odds, the contest

was maintained by a few individuals,* until the truth of the proposition was established and admitted—so fully admitted, that to deny it, at present, is deemed the result of professional ignorance.

Even now, against the most memorable and essential improvement in intellectual philosophy that the world has witnessed,† does the cry of “*speculation*” burst at once from thousands of tongues. Yet, trust me, even here, the time is approaching, and has nearly arrived, when this clamor of dissatisfaction, this war-hoop of unenlightened and illiberal hostility, shall be converted into peals of approbation and applause.

When, in the ocean-battle, the illustrious Nelson, contrary to the customary modes of attack, made his first grand movement to penetrate the centre of the opposing fleet, the cry of “*speculation*,” was, no doubt, heard

*The belief very generally prevails, even among those whose duty it is to be better informed, that the late Professor Rush was the author of the doctrine of the *non-contagion* of Yellow fever.

No opinion can be more remote from the truth. For twelve or thirteen years after the appearance of Yellow fever in Philadelphia, Dr. Rush, as his writings evince, was a strenuous contagionist.

By the medical records of the time, ample testimony is born, [that the earliest writers in favor of *non-contagion* were Professor Mitchell and the late Professor Miller of New York, and the author of this address, who was then but a youth.

Professor Physick was also one of the original defenders of *non-contagion*; but whether he wrote in its behalf, is not at present recollected.

By this confederacy was the doctrine established in opposition to the influence of Dr. Rush, who finally abandoned his opinion, and published his recantation about the year 1806 or 1807, in the Medical Repository of New York. Dr. Rush was the author of the doctrine of the *domestic origin* of Yellow fever. But, until the period mentioned, he perseveringly contended, that, although generated in the United States, by the process of putrefaction, *the disease was contagious*.

† *Phrenology*, the establishment of which no earthly power can resist. Whatever errors may be detected in its details, its fundamental principles are true. With every other system of truth, therefore, it will ultimately prevail, to the discomfiture of its enemies, and embittered denouncers.

The author alludes to *Phrenology*, not as inculcated by certain European writers, but as he teaches it himself.

from the lips of subalterns, amid the clangor of arms. But it was immediately changed into shouts of victory in behalf of the assailants; and the movement is now recognized as a splendid improvement in the art of naval war.

In fine, in every branch of science, and on every subject, when highly gifted and aspiring intellects attempt a new and arduous enterprize for the advancement of knowledge, the project uniformly calls forth from the indolent and the incapable, the charge of "*speculation*"—a tax, which the enlightened philosopher pays to the illiberal and the narrow-minded, for his attempt to be useful.

As illustrative of the folly and absurdity of this sentiment of envy, cherished by the humbly against the highly endowed, let us fancy, for a moment, a similar state of things to prevail among the tribes of inferior animals.

The aspiring eagle, unfolding his pinions, ascends towards the sun, and the wren or the tom-tit, the bunting or the featherless dodo, unable to follow him, or even to fathom the object of his ascent, exclaims "*speculation*," and consequently pronounces the monarch of birds a thoughtless visionary, for the boldness of his flight. The cause of this spectacle may be easily rendered. The eagle is conscious of great capabilities; he possesses a telescopical eye, is enterprizing in spirit, and feels his irresistible powers of ascent, while his calumniators, the Thersiteses of the feathered race, are comparatively spiritless, feeble, and sightless. Each, therefore, acts in conformity to his feelings, and the specific powers with which nature has endowed him.

In the autumnal season, a phalanx of storks, herons, or swans, mounts into the heavens, like an ascending pyra-

mid, to migrate from the frigid to the torrid zone; while a dormouse, a marmot, or a beaver, about to retire into his cheerless hybernaculum, gazing on the column in mute amazement, takes leave of it at length in the term "*speculation*"! Yet give to the slow-moving quadruped the powers and elevated instincts of the strong-winged aerial voyager, and it will follow its example, to sustain, perhaps, from other beings of inferior capabilities the same accusation.

A sloth seeing a panther ascend a tree with a wonderful bound, and, in active pursuit of food or pastime, return to the ground with equal agility exclaims, in stupid astonishment, "*speculation*"! and, for want of power to accelerate his march, perseveres, with self-complacency, in the unparalleled slowness and clumsiness of his gait. Give to him the strength and elasticity of the panther's muscle, united to the bouyancy and boldness of his spirit, and he will immediately practise the panther's leap.

In like manner, among men, bestow on the groveling and the feeble minded, the elevated qualities of those to whom nature has been more munificent, and whose beaming reputation it is their delight to make dim, and, discarding envy, jealousy, and malevolence. they will triumphantly embark in the same "*speculations*."

Such, in detail, are a few of the causes that are most powerful and operative in their encroachment on intellectual independence; and such the effects of that encroachment on the progress of knowledge.

As concerns any practical and useful inferences, deducible from the preceding general discussion, two very interesting questions present themselves; can man be induced to throw off his fetters, and assert his indepen-

dence as an intellectual being? And if so, what are the means to which he is to be indebted for the achievement of his purpose?

To render these questions more immediately pertinent to the present occasion, and to give to the consideration of them the higher interest, permit me to change the language and form, in which they are propounded, and address them to yourselves.

Are you, then, whom the world calls, and who proudly call yourselves, *independent Americans*, contented to submit to intellectual vassalage of any description? And if not, what are your means, and in what way may you best employ them, for the attainment and preservation of the entire freedom to which you aspire?

To the first of these interrogatories I must not do you the injustice to doubt for a moment the nature of the response you are prepared to render.

Many of you inherit the blood, and all of you, I trust, possess the spirit, of those gallant soldiers and inflexible patriots, who fearlessly hazarded their lives and every other earthly consideration, on the issue of a perilous and dubious war, to achieve the *political* independence of their country—that independence, which, however highly we may prize and honor it, constitutes but a part of that *catholic* independence, which it is your duty, as rational beings, to attain.

You *will not*, therefore, you *cannot* remain content with a simple maintenance of the ground transmitted to you, as an inheritance, by the wisdom, the gallantry, and the patriotism of your ancestors. This would be a practical acknowledgment of your degeneracy. To the boon received from the liberal spirit and heroic daring

of your forefathers, you will add, or at least endeavor to add, so much by your own labors, as to render your independence and freedom complete. If they fought and bled and conquered for political independence, you will not, you cannot be less zealous or less persevering, in your struggles to achieve independence of intellect. Nothing short of this can fill up that honorable measure of ambition, which belongs to enlightened and elevated minds.

Apart from all other considerations, connected with the subject, your *political* encourages you to aspire to *general* independence, with a cogency of argument, and a power of motive, that nothing can resist. That my meaning, in this instance, may be the more clear and satisfactory to you, reflect but for a moment on the mighty and felicitous result, which, in relation to the development of political knowledge, the glorious achievement of political independence has produced in our country.

In the United States alone, is true political science, comprehending a perfect knowledge of the rights of man, the foundation of law, and the principles of government, thoroughly understood. On these subjects I am justified in declaring, that American statesmen, not to speak of the vast stock of political intelligence of the community at large, possess tenfold the knowledge that is diffused throughout all the other nations of the earth. As an evidence of this, every people, and all enlightened individual foreigners, who desire a perfect and practical acquaintance with this science, direct their attention to the United States.

And to what are we to attribute this auspicious condition of things? I answer, to that unbounded range and freedom of action on political subjects, which the

intellects of our fellow citizens enjoy, in consequence of our enjoyment of political independence.

To be great in achievement, the intellect, like the person, must be perfectly unfettered. Unfettered, in relation to politics and government, it has been in the United States for the last fifty years, during which period more genuine light has been thrown on those sciences, than they had received before in as many centuries. Hence the most brilliant and glorious epoch in political science that the world has experienced, is the American revolution.

Render the human mind equally free and independent, in relation to other sciences, and the result will be the same. Light will burst on them as if descended from above. Give to it freedom on all subjects, and the millennium of knowledge will be at hand.*

*So pervasive is freedom, that it cannot be insulated. In its relation to elevated and aspiring minds, it is a contagion, against whose influence no earthly power can guard. Like water and air, it *will* diffuse itself and find its level.

Hence, in regard to its knowledge on other subjects, the American intellect has already felt the advantages of its *political* freedom, in its tendency to render it *entirely* free. To no other source can we attribute, within the *last fifty* years, its unprecedented development, and march in improvement.

Within that period, has the intellect of our country made greater advances in expansion, attainment, and important achievement, than the intellect of any other people has ever made in the space of a century; or even in a much longer time.

Nor has our political and intellectual freedom confined itself, in its effects, within our own limits. From Italy to Germany, and from the pillars of Hercules to the Ægean sea, Europe has felt its meliorating influence. The British empire has been awakened by it to higher exertions, and a more enlightened perception of things; and, sweeping over the new world like an irresistible inundation, it has contributed to render the nations of Southern America politically free. Nor, unless despotism, in some form, should again erect his standard among them, will this propitious change fail to be succeeded by a gradual disenthralment of the intellect of the inhabitants, similar to that which we have ourselves so happily experienced.

Then, and not until then, will agriculture and manufactures, commerce and the arts, directed by science and urged by persevering industry and enterprize, diffuse over the heights of Mexico, Peru, and

For the certain achievement of intellectual freedom, the rule of action is simple and plain—so simple that no one can mistake it—so plain that, literally, he who runs may read. It is comprised in two words "*Follow nature.*"* Rely on *her* as authority, not on man, consult her instead of human opinion or human prejudice; and your independence is secure.†

A brief analysis of this topic, with a view to its illustration and proof, shall close my address.

Nature, or to vary the expression, the book of nature, is the source of truth, because God is its author. Whatever coincides with it is also true, and all that *contradicts* it, is necessarily erroneous. Miracles are events beyond its ordinary powers, and out of its ordinary course; but not in opposition to it‡. Study it, then,

Chili, and over the country of the Orinoco, and the interminable plains of Amazonia and Paraguay, the same benign and regenerating influence, which we ourselves have already derived from them, in the regions of the Atlantic, the Mississippi, and the lakes.

Thus diverging from the United States, as its birth-place and central point, political and intellectual freedom, with its train of felicitous accompaniments and consequences, promises in time to irradiate with its light, and cover with its blessings, the human family.

*By *nature*, the author would be understood to mean, that infinitely wise and beautiful scheme of things, which the Deity has established for the maintenance and government of the universe, in which *he* himself constitutes the *first* and presiding *power*, and a competent knowledge of which can be acquired only by carefully studying the works of creation both material and spiritual.

This scheme, which is often denominated the *reason and nature of things*, is intended by its divine author to be, in all cases, the ultimate tribunal of truth, from whose decision there can be no appeal.

†Intellectual independence is nothing more than thinking and acting in accordance with *nature*. To go hand in hand with her is to be independent and free. To be controlled by any other power is to be enslaved.

‡The author is not a little gratified to find that his sentiments on this subject agree precisely with those of the late Dr. Brown of Edinburgh, the most rational, and therefore the ablest, expounder and defender of miracles that has ever written.

"A miracle," says that distinguished writer, "*is not a violation of any law of Nature. It involves, therefore, primarily, no contradiction, nor physical absurdity—The sequence, which it displays, may be regarded, indeed, as out of the common course of Nature, but not as contrary to that course.*" See Brown "on the relation of cause and effect," note E, p. 224, Andover edition.

faithfully, by observation, experiment, and reasoning, and employ it on all occasions as a standard of comparison, to test the verity of human opinions, and your course is safe. Independence of intellect, and improvement in knowledge will be your certain reward.

Have you, when of tender age, during school-education, in your intercourse with the world, or from any other artificial source, received a peculiar set of impressions, in any of the several departments of knowledge? When more advanced in years, and more mature in intellect, compare them faithfully with impressions derived from the volume of nature, and mark well the result. If they coincide, retain them, for they are indubitably true. But in case of discrepancy, discard the impressions derived from education, as being certainly false, and cherish those of which nature is the author.

Are you, with a view to your improvement, rendering yourselves familiar with the principles and opinions of any distinguished writer or teacher? Before adding them to your store of recognized truths, be convinced, from comparison, of their accordance with nature.

Have you received from the government under which you reside, and whose influence you feel, any particular bias of intellect, leading to the adoption of peculiar opinions? If, on examination, those opinions disagree with nature, reject them as unfounded.

Is there any thing opposed to nature and therefore to reason, in the tenets of the religion, which you are warned, by its ministers, to embrace and obey? If so, accept an assurance that it is not the religion of the God of nature. It is a counterfeit production of ignorance or knavery, or of both united, and ought to be rejected as a

solemn imposture. If, in conducting the affairs of this world, the Deity requires us to act in conformity to nature, and if we fail of success as often as we desert or oppose her guidance, he will not, to speak with reverence, he cannot command us to violate her ordinances. *which are strictly his own*, in our preparation for Heaven

Is there an effort made by feeble, indolent, or dishonest minds, to detract, in your estimation, from certain new views or processes of reasoning achieved by individuals of superior intellect and lofty aspirations? In such a case, take nothing for granted—nothing on the mere authority of any one; but examine for yourselves, and determine the whole by the standard of nature. Written or oral truth is but the interpretation of nature. But the thorough bred scholar of nature, the only real philosopher and sage, never rests satisfied with a mere *interpretation*, however distinguished its author may be, but studies the *original*.

In pursuing this course, the want of demonstration, or positive experiment, will often oblige you to resort to *analogy*, which, if sound, you ought to receive, for the time, as competent evidence. When, therefore, any proposition, supported by fair and pertinent analogy, attains the highest point of probability, it is, until refuted, to be received as true, and recognized as science.

Reject not every conception of the mind, because its truth is not yet demonstrated. Conception, or if you please, "*speculation*" must precede, and demonstration follow. In the development and establishment of all truth, this is the natural order of things. Conception or speculation, begins the process, and demonstration, or some other mode of proof completes it. Even

in the establishment of mathematical problems, no other course can possibly be pursued. The mathematician *conceives*, first, that a certain given result *can* be demonstrated, and then proceeds to the collection and arrangement of the requisite proof. It is necessarily to a process of this description, that we are indebted for every mathematical discovery and improvement, from the days of Euclid to those of Laplace.

Had not Columbus first *conceived* of the existence of a western continent, would he ever have hazarded his safety and his reputation, in a voyage to *prove* it.

Had not Franklin *speculated* first on the identity of electricity and lightning, is it likely that he would ever have *proved* it by experiment?

Had not Fulton first believed in the practicability of steam navigation, while it was not yet demonstrated by machinery, would such machinery have been constructed, or such demonstration ever been effected by him?

Had not Sir Humphrey Davy conceived that alkalis might be compound bodies, would he ever have subjected them to the process to prove it?

In relation to many other chemical discoveries, it is not true, as is generally reported, that they were the result of mere accident. At least the authors of them, when they made the discoveries, were not experimenting perfectly at random—were not experimenting without an object. No matter whether they attained their specific object or not; it was the *conception* of the practicability of such attainment, that urged them to action. They, therefore, first *speculated*, and then *experimented*, and then *discovered*. And such for ever must be the course of those who improve science. Even

the alchymists, who, while in pursuit of the "*Elixir vitæ*," or the "philosopher's stone," made important discoveries of a different character, benefited the world by means of their *speculations*. Unless men conceive vigorously and speculate boldly, they can never become conspicuous as contributors either to the promotion of science or the improvement of art. Your timid, trembling, self-serving philosophers, who shrink from all intellectual hazard, are as contemptible and inefficient, as your *military tremblers*, who shrink in battle from the sabre of the enemy. As soon will the coward acquire glory in war, as the faint-hearted investigator become either *renowned* or *useful* in science. Timidity of soul is the deadly foe of intellectual independence. It is one of the causes, and by no means the weakest, that take from the mind its freedom of action. To become useful and great, philosophers, as well as soldiers, must be enterprising and bold. Where nothing is hazarded, nothing illustrious will ever be achieved.

Had not the champions and assertors of American independence *conceived* that it could be established, would they ever have declared it, at the hazard of their own blood, and the blood of thousands of their fellow citizens? If so, the act would have called down on them, most certainly and righteously, the reprobation of the world, for what would have been justly denominated folly and rashness, wantonness and cruelty.

Away, then, with this monotonous and sickening outcry against *speculation*, which is fit only to salute and gratify the "ears of the groundlings"! It is the barren cuckoo-note of the dullard, or the war-whoop of the knave, uttered against the reputation of the gifted and the enterprising!

Instead of being censurable, as it is generally represented, *speculation* is the forerunner of all invention and improvement. It is to the bark of discovery, at once the pilot and the breeze, that forces her into motion, and directs her on her course. Never, then, from any consideration—no, never, so far surrender up your intellectual independence, as not to indulge in it, in a regulated degree, and to a reasonable extent. Nor suffer the denunciation of it to impair your respect for the opinions of those to whom it may be imputed, on account of their enterprise in pursuit of knowledge. But to return from this digression, and close my address, which is protracted not a little beyond the limits I had prescribed to it.

Science, as already observed, is the knowledge of nature as she is. To possess truth, is to see and know things as the Divine Mind sees and knows them.

When, therefore, you are in pursuit of science and truth, never confide in the opinions of any one, as conclusive authority, however richly endowed, or however extensively informed he may be. Use his labors in aid of your own, but let the only authority, to which you implicitly and finally submit, be that of nature. Learn to read and interpret aright, the ample volume with which she presents you, and you will neither forfeit your intellectual independence, nor ever be deceived.

Do you ask me, in what consists the volume of nature, which I thus recommend to you, and where it is to be found? I answer, it is every where to be found, and is composed of the entire works of creation within you and around you. It contains two grand divisions, the *moral or intellectual*, and the *physical*.

Into the first you are to look as the true standard of all science that has for its subject, the history and character of man, and the relations in which he stands to his God, his fellow-men, himself, and the various orders of inferior beings that inhabit our globe, with the multiplied duties to which those relations give origin. Of this division, the Holy Scriptures, as far as they extend,* are a divine interpretation, and are to be received as true.

The second grand division consists of four sub-divisions, the Heavens, the Earth, the Ocean, and the Atmosphere, peopled, arranged, and exquisitely systematized into a great, harmonious and operative whole. Into this you are to look as the genuine standard of all knowledge that has for its subject, the existence, the properties, and the operations of *matter*, whether living or dead.

To that magnificent and holy volume, whose author is the living God, whose contents embrace the fulness of creation, whose spirit is truth, whose text is written in the bright and everlasting characters of the Heavens, and of which man, in his highest and noblest capacity, is privileged to act but as the humble commentator—To that volume, in the last resort, from whose authority there is no appeal, and which, when fairly interpreted, will never mislead, permit me again most earnestly to refer you, as the true standard of all the knowledge, which, in your present state of existence, you are competent to acquire.

* Although the Scriptures communicate to us much sublime and precious knowledge, they neither teach us, nor were intended to teach us, all that it is the duty of the philosopher to know, respecting his moral and intellectual nature. The remainder he can learn only by studying thoroughly himself and his fellow men, both as they are in themselves, and as they stand related to creation and their God.

While influenced only by the pure and liberalizing tenets which are there contained, the human intellect, being dependent on nothing but the God of the universe, the great source of science and truth, and free from every sinister and misdirecting bias, will act with a vigour and constancy, and attain to a degree of perfection in knowledge and virtue, bounded only by the extent and power of the faculties which compose it.

Then, and not until then, will man have reached the highest point of his destination on earth. Then, and not till then, will he be privileged to encircle his radiant brow with the triple and thrice glorious wreath of philosophy, virtue, and rational piety. Then, and not until then, will commence that bright millennium, that reign of knowledge, harmony, and happiness here below, which the highly gifted and the sainted have foretold, and in which the christian joyously believes. For let that glorious condition of things commence when it may, *knowledge* must be a cardinal element in its composition.

THE END.

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